

TABLE 1. Results of soil analysis (ELISA method) at 3 inch depth (mg/kg) along Chattanooga Creek on the Glover Site collected July 22, 2003, Chattanooga, Hamilton County, Tennessee (UTC 2003). Refer to Figure 11 for sampling locations.

site number	total PAHs (mg/kg)
45	49.2
46	57.7
47	55.8
48	67.8
49	56.9
50	64.5
51	65.4
52	79.3
53	91.0
54	37.5
55	53.0
56	66.4
57	60.5
58	93.5
59	33.9
14	82.8
15	37.2
1	153.0
2	59.1
3	379.0
4	125.0
5	180.0
6	172.0
7	188.0
8	176.0
9	190.0
10	523.0
11	211.0
12	506.0
16	75.7
13	141.0
17	75.0
18	72.9
19	80.9
20	77.1
21	94.4
22	76.4
23	80.9
24	88.6
25	96.4
26	67.3
27	131.0
28	54.7
29	64.6
30	88.2
31	102.0
32	90.8
33	35.1
34	48.9
35	37.7
36	37.8
37	83.4
38	75.0
39	77.8
40	33.9
41	18.8
42	47.8
44	65.6
43	51.0

FIGURE 12. Results of soil analysis (ELISA method) at 3 inch depth (mg/kg) along Chattanooga Creek on the Glover site collected July 22, 2003, Chattanooga, Hamilton County, Tennessee (UTC 2003). Data displayed north to south as per Figure 11. Sample locations with >200 mg/kg PAHs are labeled.

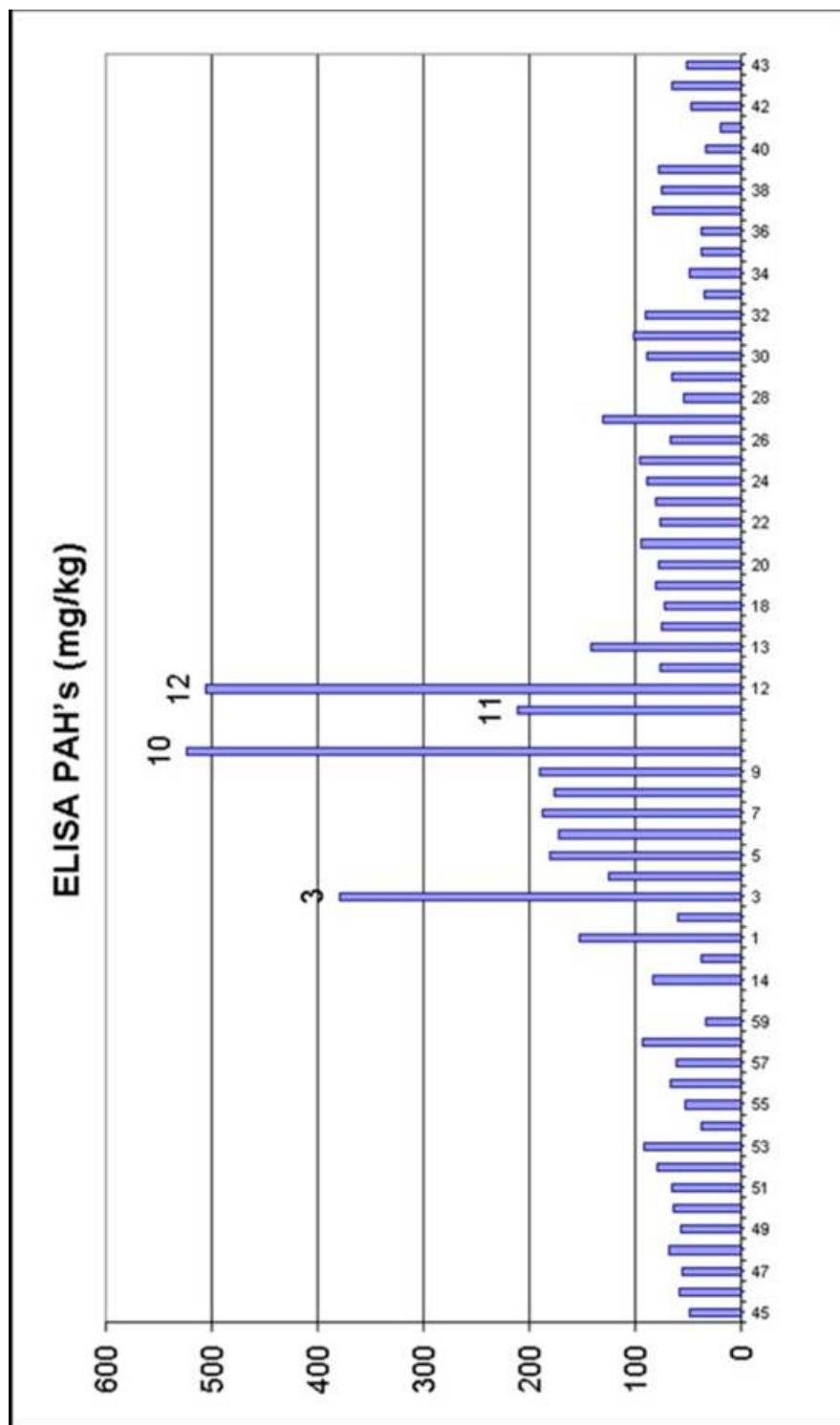


TABLE 2. Results of soil analysis at 3 inch depth (mg/kg) along Chattanooga Creek on the Glover site collected July 22, 2003, Chattanooga, Hamilton County, Tennessee (UTC 2003). Data displayed roughly north to south as per Figure 11.

FIGURE 13. Results of soil analysis at 3 inch depth for specific individual PAHs (mg/kg) collected July 22, 2003, at selected sampling sites on the Glover property, Chattanooga, Hamilton County, Tennessee (UTC 2003). Notice the overall peaks and valleys of the data are similar. This suggests the relative abundance of each PAH appears to be evenly distributed on the site.

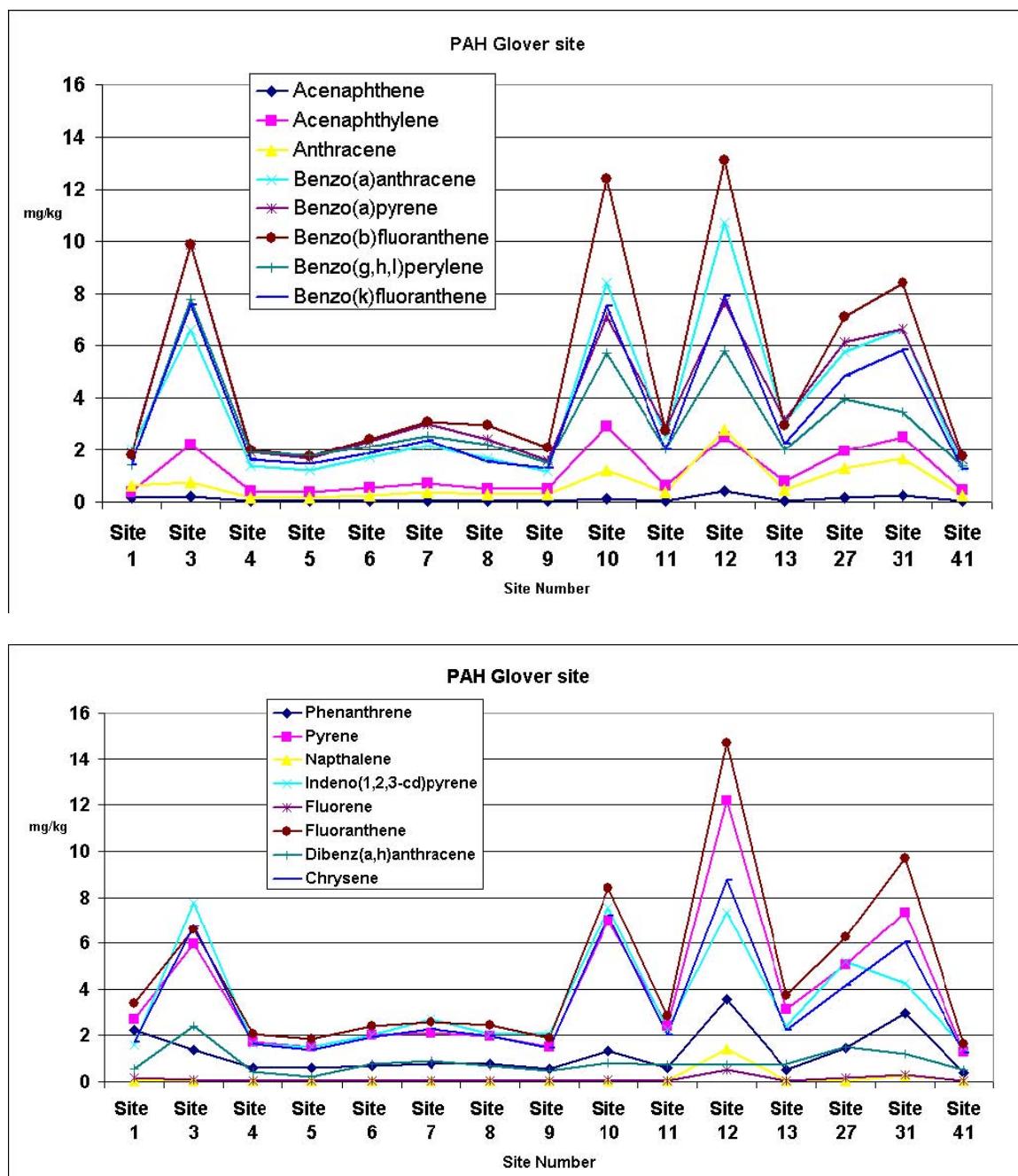


FIGURE 14. Results of soil analysis (ELISA method) at 3 inch depth (mg/kg) at specific sampling points along Chattanooga Creek on the Glover site collected July 22, 2003, Chattanooga, Hamilton County, Tennessee (UTC 2003). Peaks and valleys in this chart resemble those of individual PAHs presented prior in Figure 13 suggesting that ELISA testing is a valid PAH screening tool.

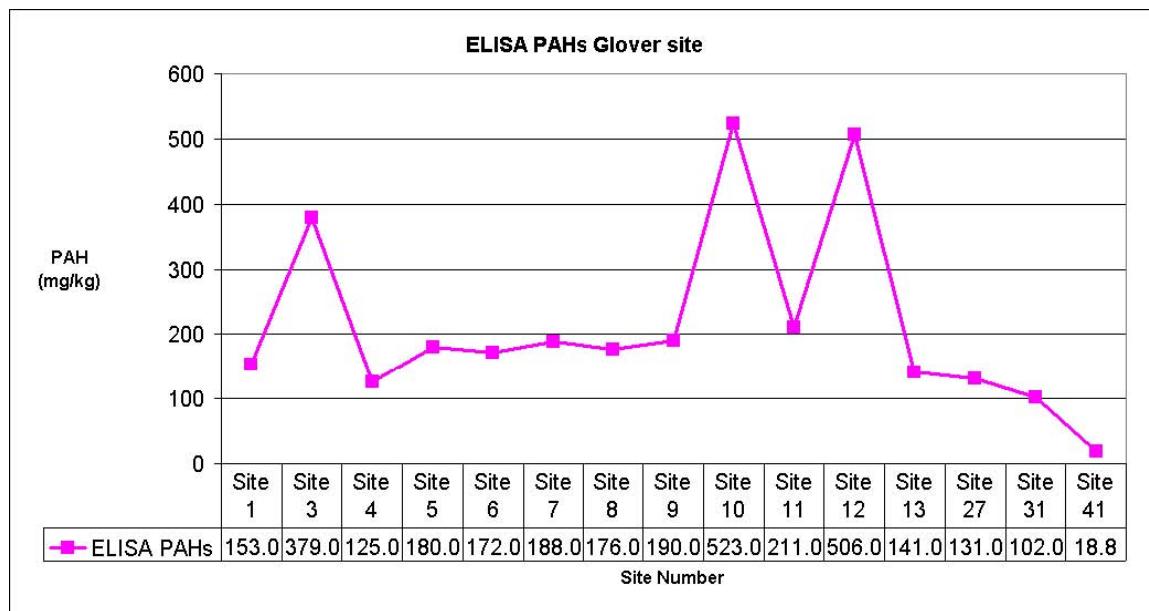
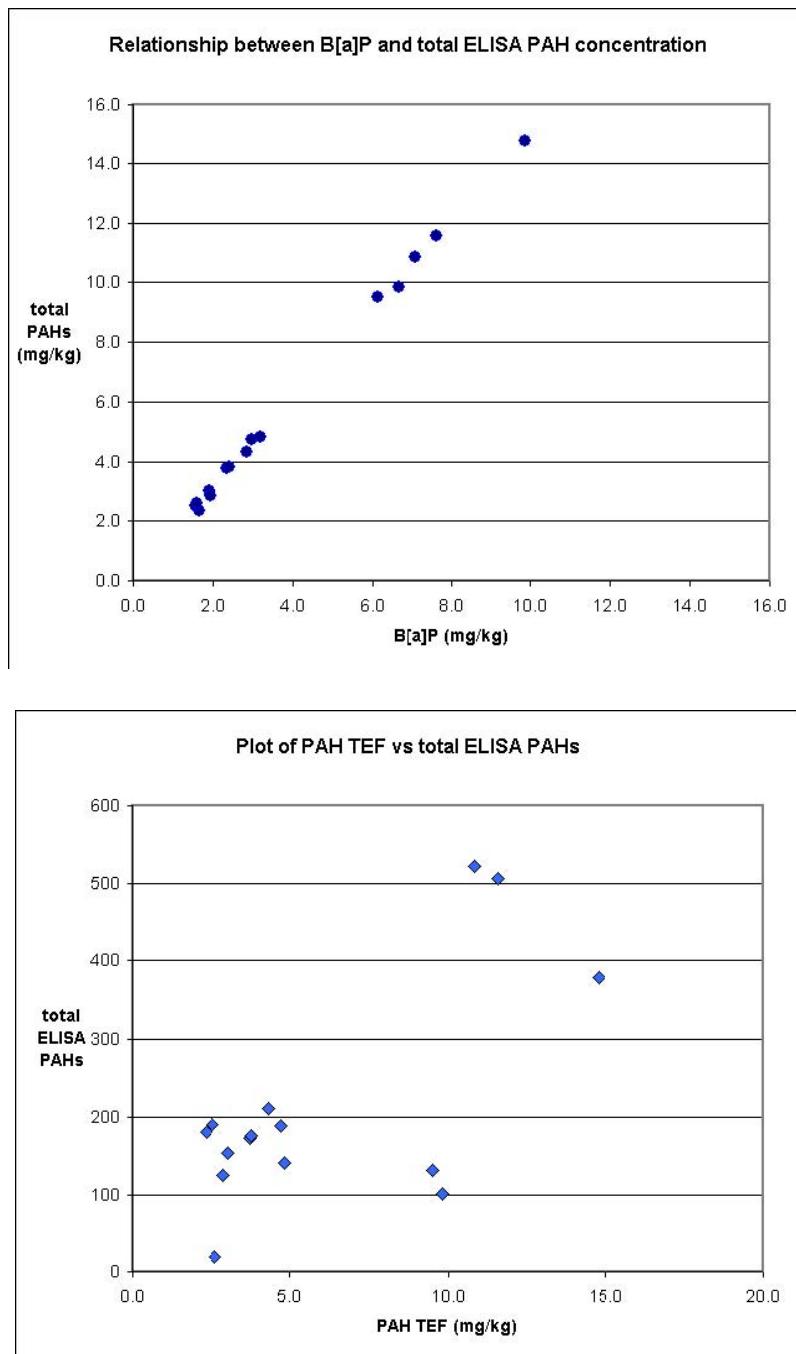
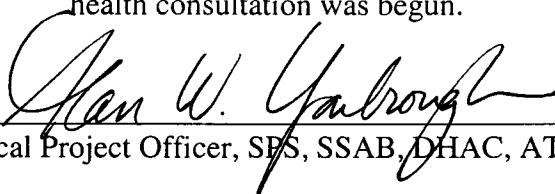


FIGURE 15. Plotting the concentration of benzo[a]pyrene, considered the most toxic PAH, with the total PAH concentration measured by the ELISA method shows a linear relationship. When the result of the PAH TEF is plotted with total PAH concentration determined by ELISA, no apparent relationship capable of predicting toxicity from the ELISA screening tool was determined for PAHs in the floodplain at Glover Site.



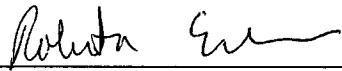
Certification

This Public Health Consultation: Glover Site, Chattanooga, Hamilton County, Tennessee, was prepared by the Tennessee Department of Health, Communicable and Environmental Disease Services, Environmental Epidemiology, under a Cooperative Agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It was prepared in accordance with the approved methodology and procedures that existed at the time the health consultation was begun.



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The Division of Health Assessment and Consultation, ATSDR, has reviewed this public health consultation and concurs with the findings.



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